SECRETARIAT OF AGRICULTURE, LIVESTOCK, FISHERIES AND FOOD

NATIONAL ANIMAL HEALTH AND AGRIFOOD QUALITY SERVICE

S E N A S A

"CLARIFICATION TO THE INFORMATION REQUESTED FOR RECOGNITION AS REGION"

NEWCASTLE DISEASE

Form #0579-0040

R E P U B L I C O F A R G E N T I N A

June 2003

DOCUMENT FOR RECOGNITION AS NEWCASTLE DISEASE FREE REGION

This document was issued based on the guidelines of Form #0579-0040 "Clarification of Information Requested for Recognition as a Region" and the additional information requested in the letter addressed to Dr. Bernardo CANE by the Deputy Administrator of Veterinary Services, Mr. W. Ron DeHaven.

The issues not addressed in this document shall be responded during the visit. Any additional information required shall be supplied at that time.

1- AUTHORITY, ORGANIZATION AND INFRASTRUCTURE OF THE VETERINARY SERVICES IN THE REGION.

Complementary information to the Document "Information provided by SENASA for the recognition of Argentina as a region, as defined in Section 92.2, Title 9 of the Code of Federal Regulations for Foot and Mouth Disease" Pages 3 to 7 and Annex I.

POULTRY AND FARM ANIMALS PROGRAM

The Poultry and Farm Animals Program is managed by the National Animal Health Office (DNSA) that schedules, plans, inspects and assesses animal health programs to eradicate poultry diseases of economic importance in production or that represent a risk for human health.

Its mission is to maintain and improve the health status of aviculture in Argentina and, especially, of diseases that affect the international trade of poultry products (Avian Influenza and Newcastle Disease) and directly impact production levels and efficiency.

Actions:

1) Managing an Active Surveillance Program for NEWCASTLE DISEASE and AVIAN INFLUENZA to support and maintain Argentina's current epidemiological status as FREE of both these diseases, and identify possible risks of re-importing them.
2) Coordinating actions in the event of a suspect or confirmed outbreak of an exotic disease or other that has been eradicated from Argentina, or that is subject to a program.
3) Strengthening and including all poultry breeding farms in Argentina in the National Control Program for Avian Mycoplasmosis and Salmonellosis.
4) Issuing rules to ensure stringent control of the health status of imported genetic material, one-day old birds, commercial hatching eggs and eggs of other birds, and poultry products.
5) Overseeing compliance with SENASA Resolution #614/97 on biosafety measures at poultry production farms.
6) Overseeing compliance with SAGPyA Resolution #723/2000 that requires mandatory vaccination of homing pigeons against Newcastle Disease.

Consolidation of External Markets

The Office of International Affairs continuously implements strategies and actions to provide information to third countries on the health status of the poultry population in Argentina with the purpose of extending and improving export conditions, and opening new markets.

The following results were attained:

- Incorporation of Argentina to the List of Third Countries that export poultry meat to the European Union (EU). Goal attained in December 1996.
- Argentina obtained O.I.E. (Office International des Epizooties) recognition as a Newcastle Disease Free Country. Goal attained in July 1997. Status was acknowledged by the European Union, Chile and other countries.
- Opening of the Japanese market. Goal recently attained for exports of poultry meat and egg byproducts.

NATIONAL AGRIFOOD INSPECTION OFFICE (DNFA)

The Poultry and Eggs Division of the National Agrifood Inspection Office is responsible for the hygiene and health of poultry products (i.e. poultry meat, byproducts, fresh and processed eggs). The Official Veterinary Service inspector that is assigned to every plant that slaughters for export or for domestic consumption, must be present at the time of slaughter to ensure that the ante and post mortem requirements are followed.

LABORATORIES AND TECHNICAL CONTROL OFFICE

The Laboratories and Technical Control Office is the Reference Laboratory of the National Animal Health and Agrifood Quality Service. Its area of responsibility includes the specialized laboratories that perform analytical testing for Animal and Plant Health, Food Safety, and quality of farm Products, Byproducts and Inputs.
The Office has an Animal Health Laboratory and a Plant Health Laboratory and for certain activities has the support of a Network of Regional Laboratories and a Network of Monitoring and Reference Laboratories.

Its functions include:

- Defining and validating the Reference Methods defined by SENASA for the Control Programs.
- Verifying compliance with the Laboratory's Quality System and Management Procedures.

- Defining Official Test Protocols and analytically Certifying the products inspected by SENASA.
- Periodically auditing SENASA's Network of Laboratories and organizing inter-laboratory tests.
- Confirming positive test results issued by the laboratories that participate in SENASA's Network of Laboratories.
- Verifying compliance with the Biosafety Standards defined by SENASA.
- Periodically auditing and testing vaccine and veterinary medicine manufacturers.
- Collaborating with other SENASA Offices in their assessment of the general analytical results of said controls.

For the last thirty years this Office has performed these tasks continuously and has supported the decisions and actions of the Service before National and International Bodies. Its activities favored Argentina's exports as they facilitated mutual recognition, and contributed to spread information and update legislation.

The role of the Community, the Farmers, and the Industry

The community participates in the Poultry and Farm Animals Program through the National Poultry Health Commission, the Provincial Animal Health Commissions (COPROSAS), and the Local Animal Health NGOs.

National Poultry Health Commission

The National Poultry Health Commission, which is part of the National Animal Health and Agrifood Quality Service, includes representatives of official technical bodies such as Universities, the INTA (National Farm Technology Institute), the Argentine Secretariat of Agriculture, Fisheries and Food and equivalent bodies in the Provinces, and technical and scientific experts from the private sector. The Commission meets regularly to analyze and submit new projects, and report and assess the development of existing animal health plans and programs.

The Commission offers all the interested parties (governmental and non-governmental) an opportunity to participate in the analysis and definition of the eradication policies. The Commission is chaired by the President of SENASA and its members represent the public and private players in the farming sector.

The Industry

Aviculture in Argentina is represented by two trade associations: the Argentine Cham-

ber of Poultry Producers (CAPIA) whose members are egg producers, and the Association of Poultry Processing Companies (CEPA) that represents poultry meat producers. Both these bodies participate in other provincial or regional trade associations such as CAEFA that represents the meat producers of Entre Ríos, the Regional Farming Cooperative of Crespo, the Association of Poultry Producers of Córdoba, and the Poultry Producers' Cooperative "La Primera" of Santa Fe, among others. Technical experts of the industry continuously work with the producers promoting production, management and animal health programs to increase the quality of their products.

Other comments from USDA - APHIS

What education and certification requirements apply for each category of employees mentioned?

Certification is the responsibility of official SENASA veterinary physicians that are licensed to practice veterinary medicine.

How are private veterinary physicians authorized to work at a Federal/national or State/provincial level ?

SENASA's National Agrifood Inspection Office keeps a list of private veterinary physicians "accredited" or licensed to inspect hygiene and quality aspects, as required by the Official Service, at manufacturing plants, slaughtering plants, etc., that process exclusively for domestic consumption. These professionals are known as "Registered Veterinarians".

What is the authority of each category of employees to enforce statutory compliance?

As stated in the Animal Health Enforcement Act (#3959) and given the inherent responsibility of SENASA, official staff must report non-conformities and apply corrective measures. Following this, the Legal Affairs Office intervenes, issues an opinion and, if applicable, applies penalties as defined in current statutes.

All regulations related to this disease are based on the Animal Health Enforcement Act that grants authority to the Government to restrict and regulate individual rights to pursue the general welfare. It basically establishes the measures that are necessary to protect safety and health. The Animal Health Enforcement Act (#3959) and its Regulatory Decree are the two main statutes.

These rules establish: mandatory reporting, special measures on infected operations such as sanitary slaughter, permit requirements for shipment of birds and products, mandatory compliance with eradication or stamping-out programs, vaccination specifications including type of vaccine and form of administration, requirements to import birds, eggs and products, and other measures or activities to achieve the proposed goals.

How many veterinary physicians are trained in poultry disease control?

The Veterinary Profession participates in the Program through the professionals who are aviculture experts and members of technical bodies, such as the Association of Veterinary Specialists in Aviculture (AMEVEA) of Entre Ríos, and the Aviculture Work Group (GTA) that includes veterinarians from different parts of the country. These two groups have 320 members that are veterinary physicians specialized in aviculture.

How much time do field veterinarians dedicate to inspecting poultry meat, poultry farms, and surveillance of avian diseases?
How frequently do they visit, what is the purpose of their visits, coverage of different types of operations, and sampling protocols?
How many times are poultry farms or other poultry operations visited per year?
What is the purpose of these inspections and how are the operations selected?
Is reporting of diseased birds mandatory? If yes, what is the procedure (who reports and to whom) and what penalties are applied if a case is not reported?

In 2002, the records of the Poultry Program indicate that there were 3234 approved poultry farms. In 2002, local veterinarians that report to the Field Office at SENASA headquarters, performed 419 inspections, 77 of which were laying hen operations, 299 were broiler farms, and 43 were hatcheries.

The inspections were performed for different purposes. Fattening poultry operations were inspected to verify compliance with the requirements to export poultry meat to the European Union. Hatcheries were inspected prior to shipment of one-day old birds. Other purposes include verification of compliance with epidemiological surveillance sampling requirements.

WHICH ARE THE SAMPLING PROCEDURES?

Diagnosis of Newcastle Disease is based on clocal and tracheal swabs of diseased birds, faeces or intestine (including contents), and tissues from the brain, trachea, liver, spleen and other affected organs of recently dead or diseased birds with clinical symptoms that are slaughtered and necropsied for serological testing, virus isolation, and structural studies.

SAMPLING FOR ACTIVE EPIDEMIO-SURVEILLANCE

INSTRUCTIONS TO COLLECT SPECIMENS FROM BIRDS TO IDENTIFY NEWCASTLE DISEASE VIRUS AND AVIAN INFLUENZA ANTIBODIES

Cloacal and/or Tracheal Swabbing: (the collected specimens are inoculated in chicken embryos to culture and isolate Newcastle Disease Virus).

Materials:

Bleeding tubes with cap (very clean, preferably sterile).

Sterile swabs (if the swabs that the laboratory provides are not available, purchase the "Cotonette" swabs that are used for children, at the pharmacy).

Antibiotic Solution (if unavailable, use sterile saline solution and state this on the sample collection protocol).

(Materials may be requested from the Laboratory in Martínez. If the Local Office has the tubes, purchase commercially available swabs and saline solution).

Nº of Samples: As required. Each swab represents a sample. Swabs from backyard premises may be pooled up to 5 samples from the same origin.

Specimen Collection:

1. Place a few drops of saline solution in each tube.
2. Dip the swab in the saline solution in the tube.
3. Insert the swab in the trachea or cloaca (one per bird).
4. Put the swab back in the tube with the end containing the sample in the saline solution.
5. Immediately place in the refrigerator and remit as soon as possible to the Central Laboratory in Martínez.

Whole Blood Samples: (to identify antibodies against Avian Influenza and Newcastle Disease Virus).

1) At the slaughter plant: Collect blood in the tubes provided by SENASA when birds are bled after slaughter, to obtain at least 30 identified tubes per batch of birds.
2) From other birds: Puncture the wing or cardiac vein with a needle and syringe, and place the tube to collect the blood.

Remittance of Samples: Place the tubes containing the swabs or blood in a probe holder, place in a refrigerated container and remit to the Central Laboratory in Martínez.

Identification of the Samples: See the Procedures Manual (Annex III).

Packaging: See the Procedures Manual.

Shipment of Samples: See the Procedures Manual.

WHAT ARE THE ROUTINE DIAGNOSTIC PROCEDURES AND TECHNIQUES FOR EACH AGENT OF THE DISEASE OF INTEREST?

RAPID TEST TO DETECT NEWCASTLE DISEASE ANTIBODIES

1. Detection of antibodies in non-vaccinated birds

Most laboratories that perform diagnostic testing for Newcastle Disease are familiar with the haemoagglutination inhibition (HI) test. Recommendations included below apply to the HI test to detect virus antibodies. ELISA testing is also effective to detect virus antibodies.

2. Blood Samples

Sample all birds when the flock size is less that 20 animals and (*missing in the original)* when the flock is larger, to ensure a 99% probability of finding at least one positive serum if 25% or more of the flock is positive, regardless of the number of birds in the flock. Allow the blood to clot and extract the serum for testing.

3. Identification of Antibodies

Test the capacity of the individual serum samples to inhibit the haemoagglutinating antigen of the Newcastle Disease Virus with standard HI tests, as described in the pertinent section.

Given the different opinions about using 4 or 8 haemoagglutination units (HAU) for the HI test and, as it seems that both doses are valid, each laboratory shall decide on the number of units required. It is important to remember that the level at which the serum is considered positive with 4 HAU will be different based on the selected antigen. A serum sample shall be positive when the number of titres is higher or equal to 2 4, whereas with 8 HAU, the number of titres shall be higher or equal to 2 3.

HAEMOAGGLUTINATION (HA) TEST

Reagent

a) Isotonic phosphate buffered saline (PBS) (0.05 M) pH 7.0 - 7.4.

b) Collect red blood cells (RBC) from a minimum of 3 SPF birds (if unavailable, use blood from birds monitored regularly and shown to be free from antibodies to Newcastle Disease Virus) and mix with an equal volume of Alsever's solution. Cells should be washed three times in an isotonic PBS as a 1% solution before use.

c) Standard antigen recommended: La Sota strain of Newcastle Disease (ND) Virus.

Procedure

a) Take 0.025 ml of isotonic PBS (0,05 M) pH 7.0 - 7.4.

b) Place 0.025 ml of the virus suspension (i.e. alantoic fluid) in the first well.

c) With a micropipette, make twofold microdilutions of the virus (from 1:2 to 1:4 096) across the plate.

d) Place another 0.025 ml of isotonic PBS in each well.

e) Add 0.025 ml of 1% RBC to each well.

f) Mix by tapping the plate gently and store at 4°C.

g) Read the plates after 30 or 40 minutes, when controls have settled. To read, tilt the plate and observe the presence or absence of tear-shaped streaming of RBCs. Wells in which haemoagglutination did not occur should present a stream that is similar to the one of the virus free control wells.

h) Haemoagglutination titres shall be read to the highest dilution giving complete RBC agglutination. This represents one haemagglutination unit (HAU). For accurate determination of HA titres test the virus with a close range of an initial series of dilutions, e.g. 1:3, 1:4, 1:5, 1:6, etc. This is the recommended method to prepare the antigen for the Haemoagglutination Inhibition (HI) Test.

- HAEMOAGGLUTINATION INHIBITION (HI) TEST

Reagents

a) Isotonic phosphate buffered solution (PBS).

b) Virus infected alantoic fluid diluted with isotonic PBS to contain 4 or 8 haemoagglutination units per 0.025 ml.

c) 1% chicken RBCs.

d) Negative control chicken serum.

e) Positive control serum.

Procedure

a) Dispense 0.025 ml of isotonic PBS in each well of a plastic microtitre plate (use a V-bottomed microtitre plate).

b) Dispense 0.025 ml of serum in the first well of the plate.

c) With a micropipette, make twofold microdilutions of the serum across the plate.

d) Add 0.025 ml of diluted alantoic fluid containing 4 or 8 HA units.

e) Mix by tapping the plate gently and store at 4°C for at least 60 minutes, or leave at room temperature for at least 30 minutes.

f) Add 0.025 of 1% RBC to each well.

g) Mix by tapping the plate gently and store at 4°C.

h) Read the plates after 30 - 40 minutes, when control RBCs have settled. To read, tilt the plate and observe the presence or absence of tear-shaped streaming of RBCs similar to the one of the virus free control wells containing only RBCs (0.025 ml) and isotonic PBS (0.05 ml).

i) Haemoagglutination Inhibition titres shall be the highest dilution of antiserum that produces a complete inhibition of 4 or 8 virus units (all tests shall include HA titres to confirm the presence of the necessary HA units).

j) Validity of results shall be assessed against a negative control serum which should not give a titre above 23 for 4 HA units or 22 for 8 HA units, and a positive control serum for which the titre should be within one dilution immediately higher or lower than the known titre.

- INTRACEREBRAL PATHOGENICITY INDEX (ICPI)

1. Dilute 1:10 infective alantoic fluid (HA titres above 24) in sterile saline (no antibiotics may be used).

2. Inject 0.05 ml of the diluted virus in the brain of a total number of 10 SPF one-day old chickens (i.e. 24 hours old and 40 hours after hatching).

3. Examine the birds every 24 hours for 8 days.

4. Score each bird after examination as follows: 0=normal, 1=diseased, 3=dead. Calculate the index as indicated below:

SYMPTOMS	DAYS AFTER INOCULATION								N° of BIRDS
CLINICAL	1	2	3	4	5	6	7	8	TOTAL
Normal	10	4	0	0	0	0	0	0	4x10
Diseased	0	6	10	4	0	0	0	0	20x1
Dead	0	0	0	6	10	10	10	10	46x2

The index is the mean score per bird and per observation =112/80= 1.4

- MEAN DEATH TIME WITH MINIMUM LETHAL DOSE (MDT - MLD)

1. Dilute the virus from 10-4 to 10-10.

2. Inoculate 6 embryos with each dilution, beginning with 10-6.

The dose is 0.1 ml per embryo in the alantoic cavity.

3. Observe every 8 hours.

(MLD is the highest dilution that causes the death of all the embryos in the group).

Example to calculate and read results:

Dilution	Hours after Inoculation										% of
of the Virus	24	32	40	48	56	64	72	80	88	96	Mortality
-10	0	0	0	0	0	0	0	0	0	0	0
-9	0	0	0	0	0	0	0	0	0	0	0
-8	0	0	0	0	0	3	0	0	0	0	50DL50=8
-7	0	0	0	1	1	3	1	-	-	-	100MLD=7
-6	0	0	1	3	2	-	-	-	-	-	100

Total hours with MLD = (1x48) + (1x56) + (3x64) + (1x72)

= 48 + 56 + 192 + 72

= 368 (total number of hours)

MDT with MLD = Total number of hours = 368 = 61 hours

N° of embryos 6

- VIRUS ISOLATION

Virus Isolation in Embryonated Chicken Eggs

Inoculate 0.1 - 0.2 ml of the clarified supernatant fluid in the alantoic cavity of at least 4 embryonated chicken eggs incubated for a period of 8 - 10 days. Preferably, the eggs should be from a SPF flock. If unavailable, eggs from a flock free of antibodies to Newcastle Disease may be used. Store inoculated eggs at 37°C and candle daily. Store eggs that contain dead or moribund embryos at 4°C. Others shall be kept at the same temperature for 6 days after inoculation. Discard embryos that die within 24 hrs. of inoculation. HA testing of the alantoic or amniotic fluid is also required. If the HA test is negative, repeat the above procedure using non-diluted alantoic or amniotic fluid as inoculum.
If the HA test is positive, verify the absence of bacteria with a culture. If the presence of bacteria is confirmed, filter the fluids through a 450 nm membrane, add an antibiotic, and inoculate embryonated chicken eggs, as described above.

- DIFFERENTIAL DIAGNOSIS
1. Preliminary Differentiation
To restrict the spreading of Newcastle Disease (ND), immediate measures must be adopted including HI testing of HA agents, as described above. Positive inhibition, i.e. 2 4 or more, with specific policlonal antiserum against the ND Virus (with known titres of at least 2 9), shall be interpreted as sufficient preliminary identification to adopt precautionary measures against the disease.

2. Confirmation
The presence of ND virus shall be reconfirmed with HI of monospecific chicken antiserum. All positive materials shall be tested to determine the Pathogenicity Index. Pathogenicity indices above 0.7 shall indicate the presence of the virus and shall require disease eradication measures.
As vaccinal strains may be isolated live, and to identify them rapidly, SENASA's laboratory shall attempt to obtain the monoclonal antibodies and shall provide them to the laboratories that participate in the Network to enable confirmation of the vaccinal strains with simple HI tests.

WHAT LAWS, RULES AND PROCEDURES ARE CURRENTLY IN FORCE? (FOR EXAMPLE IS FEEDING WASTE OR WASTE DERIVED FEED ALLOWED? (IF YES, WHAT RESTRICTIONS APPLY?) (See Annex I)

The following rules are in force:
Resolution #690/65: Authorizes the importation of ND vaccines (Section 2 and 3 partially annulled). Requires mandatory testing by SENASA of domestically manufactured and imported vaccines

Decree #254/67: Includes Newcastle Disease and others in the General Animal Health Enforcement Law. As a result, reporting and eradication of ND is mandatory.

SAyG Resolution #803/74: Includes Fowl Typhoid and other infections caused by *Salmonella* sp. in the General Animal Health Enforcement Law.

Resolution SAGPYA Nº 446/87: Declares ARGENTINA free of ND velogenic strains. Questionnaire to obtain authorization to export to Argentina.

SENASA Resolution #706/91: Establishes health controls for imported one-day old birds and hatching eggs for incubation that enter through the Ezeiza International Airport.

Rule #17/94: Establishes the NETWORK of LABORATORIES authorized to issue official diagnostic test results for poultry diseases.

SENASA Resolution #1462/94: Establishes the National Poultry Health Commission.

Resolution #221/95: Establishes hygiene and animal health safety standards for imported and exported hatching eggs and one-day old chickens. Resolution approved by MERCOSUR.

SENASA Resolution #234/96: Creates the National Epidemio-Surveillance System.

SENASA Resolution #465/96: Establishes the requirements for ND vaccines.

SENASA Resolution #683/96: Establishes contingency actions and measures in the event of an outbreak or suspect case of ND.

SENASA Resolution # 614/97: Standards for the habilitation of avian production operations and waste disposal procedures.

SENASA Resolution #1078/2000: Establishes guidelines for surveillance and Emergency Situations of Highly Pathogenic Avian Influenza.

SENASA Resolution #203/2001: Mandatory slaughter of imported one-day old birds and/or hatching eggs for incubation that test positive for *Mycoplasma* (*MG* and *MS*) or *Salmonella* (*S. enteritidis, S. gallinarum - pullorum, S. paratyphi* and *S.eidelberg*).

SENASA Resolution #498/2001: Bans imports of commercial hybrids (one-day old birds and hatching eggs for incubation), broilers for fattening and/or commercial laying hens, and only permits importation of one-day old breeding birds of grandparent or parent lines.

SENASA Resolution #529/2002: Specifically authorizes importation of light weight breeding hens, grandparent and great-grandparent breeding stock, and thoroughbred hens.

Resolution SENASA 598/2002: Establishes requirements for the importation of one-day old birds or fertile eggs for incubation aimed to obtain pure breeds, consanguineous linage, crossbreeding linage and breeders. Derogates Resolution N° 529/2002

SENASA Resolution #882/2002: Establishes mandatory compliance with the Avian Mycoplasmosis and Salmonellosis Program for all poultry breeding operations, within the framework of the National Poultry Improvement Program.

WHAT SAFETY MEASURES ARE APPLIED AT THE POINTS OF ENTRY INTO THE COUNTRY TO CONTROL IMPORTED MATERIAL THAT MAY CARRY SPECIFIC INFECTIOUS AGENTS?

National and international trade of birds, poultry products, poultry genetics, biologicals and poultry feed, is authorized provided the risk for public and animal health is acceptable, as determined by existing scientific information, appropriate processes and methods, inspection, sampling and testing methods, prevalence of diseases, ecological and environmental conditions, quarantine systems, and other risk mitigation measures that are defined on a case by case basis.

Import rules and requirements established by Argentina basically state that:

Countries that export birds or poultry products to Argentina must fill out a questionnaire stating their status for ND and Avian Influenza before the entry of the products is approved (SENASA Resolution #446/97). Importation of live birds or poultry products from countries or regions with Highly Pathogenic Avian Influenza is banned. The assessment of the questionnaire, including any necessary clarifications or visits by SENASA officials to the country interested in exporting to Argentina, may lead to the following situations:

For Poultry Products (SENASA Resolution #46/2000)

a) Country not authorized to export (e.g.: China, Mexico).

b) Country or region authorized with Model B of the Animal Health Certificate (testing to exclude the presence of ND virus required). (e.g.: Paraguay and part of Brazil).

c) Country or region authorized with Model A of the Animal Health Certificate and for which testing as mentioned in item b) is not required (e.g.: Chile and some States of Brazil).

For Live Birds (non-industrial, ornamental birds)

a) Non-authorized country (e.g.: China, Paraguay, India, Mexico etc.)

b) Authorized country, mandatory quarantine required at SENASA approved facilities where the birds are tested for ND, AI, and others (Salmonellosis, Mycoplasmosis).

For one-day old Birds and Hatching Eggs (SENASA Resolution # 221/95)

a) Non-authorized country

b) Authorized country, quarantine required at the farm of destination. When these birds enter the country they are sampled to test for Mycoplasmosis, Salmonella, ND, and Avian Influenza.

The new rules and requirements to import one-day old birds and hatching eggs for incubation seek to protect the health status of the flocks and of aviculture in general. These rules are:

Resolution #203/2001: Requires mandatory slaughter of imported one-day old birds and/or hatching eggs that test positive for Mycoplasma (MG and MS) or Salmonella (*S. enteritidis, S. gallinarum - pullorum, S .paratyphi* and *S. eidelberg*).

Resolution #498/2001: Bans imports of commercial hybrids (one-day old birds and hatching eggs for incubation), broilers for fattening and/or commercial laying hens, and only authorizes importation of one-day old breeding birds of grandparent or parent lines.

SENASA Resolution #529/2002: Specifically authorizes importation of light weight breeding hens, grandparent and great-grandparent breeding stock, and thoroughbred hens.

Genetic material is imported from the United States, the Netherlands, France, Great Britain, and Brazil through the following points of entry:

a) International Ezeiza Airport "Ministro Pistarini" in Buenos Aires.
b) International Bridge "Tancredo Neves" that links the City of Iguazú (Misiones), with the City of Foz do Iguazú (Brazil).
c) International Tunnel of the Cristo Redentor System, that connects the Province of Mendoza with Chile.

At these border posts, official SENASA staff inspect the products and check that the imported material is accompanied by the required documentation and Health Certificates of the country of origin.

2- DO YOU KNOW IF THE INFECTIOUS AGENT IS PRESENT IN THE REGION? IF YES, WHAT IS ITS PREVALENCE? IF NO, WHEN WAS THE DISEASE LAST DIAGNOSED?

Status for the Disease

BACKGROUND INFORMATION ON NEWCASTLE DISEASE IN ARGENTINA

Newcastle Disease was first diagnosed in Argentina in 1961. In 1967, with the incorporation of the disease in Section 6 of the General Animal Health Enforcement Law, reporting of cases became mandatory (Decree #254/67).

The appearance of ND followed the efforts to develop industrial poultry production systems in Argentina and the importation of the first "hybrids" for intensive production systems.

Between 1961 and the end of the 1960's Argentina had three epidemics. During the first epidemic that occurred in 1961, the Laboratory of the University of Buenos Aires and the INTA isolated a velogenic neurotropic strain with high pathogenicity and morbidity levels.

The second epidemic with similar epidemiological characteristics, occurred in 1966. The velogenic viscerotropic strain that was isolated was named after its place of origin, "Moreno".

The third epidemic occurred in 1970. The strain that was isolated by the University of La Plata was also named after its place of origin, "Trenque Lauquen".

The organized control of ND began with the approval of live vaccines in 1965.

In the years that followed, the increase in the availability of domestically manufactured and imported live or inactivated virus vaccines and the awareness of poultry producers of the risk and threat posed by the disease, led to the establishment of vaccination programs requiring different vaccine types and doses for the various production cycles. Farmers and professionals working in poultry production followed the procedures and, as a result, good vaccine coverage was attained.

The outbreaks that occurred sporadically after the vaccination program was put in place coincided with the time in which the birds had no vaccine coverage as a result of disease related depressed immunity, technical problems with the administration of the vaccine, or the interruption of vaccination because, as the disease was absent, farmers "forgot" to vaccinate.

LAST OUTBREAK OF NEWCASTLE DISEASE IN ARGENTINA

The last two ND outbreaks occurred in August and October 1987.

1987

DATE: Month of August.

SITE: 4 backyard premises in Ayacucho, Province of Buenos Aires.

AFFECTED BIRDS: hens.

NUMBER OF BIRDS: 300, approximately.

MEASURES ADOPTED: Sanitary Slaughter. Disinfection.

ORIGIN OF THE INFECTION: unvaccinated birds kept in backyard premises were taken to an exhibition and developed symptoms during the show. The infection spread to other birds at the site.

VIRUS ISOLATION: velogenic strain of ND virus (1).

1987

DATE: Month of October.

PLACE: Concepción del Uruguay, Province of Entre Ríos.

TYPE OF BIRDS: industrial birds. Broilers.

NUMBER OF BIRDS: 9 poultry farms with 2 sheds each, housing 10,000 birds in each shed. Total: 180.000.
ORIGIN OF THE INFECTION: unknown.
VIRUS ISOLATION: velogenic viscerotropic strain of ND (1).
TIME BETWEEN INFECTION AND DETECTION: approximately 4 days.
(1) In both cases, the typing of the strain was only based on the Mean Death Time (MDT) of the embryo.
MEASURES ADOPTED: sanitary slaughter. Disinfection and vaccination.

1) Disinfection of premises.
2) Collection of blood samples for serum testing.
3) For the following 35 days, all animals that died on neighboring premises within a radius of 25 Km. were necropsied.
4) Stringent biosafety measures were adopted (access controls at the farms, destination of waste material, testing of wild birds).

The epidemiological follow-up did not find the origin of the outbreak. A velogenic viscerotropic strain of the virus was identified.

IS REPORTING OF THE PRESENCE OF THE DISEASE OR INFECTIOUS AGENT REQUIRED IN THE REGION ?

Federal, provincial and municipal authorities, veterinary physicians in private practice, and all persons responsible for, or in charge of poultry farms (commercial operations and backyard premises) and any other person that identifies in the birds that he/she keeps, symptoms compatible with any of the exotic or high risk diseases of birds, or that know or indirectly learn about the presence or existence or suspect cases of any of these diseases, or positive test results for said diseases, must immediately report the situation to the local animal health authorities or to the National Animal Health Office of the NATIONAL ANIMAL HEALTH AND AGRIFOOD QUALITY SERVICE, as stated in Act #3959, General Animal Health Enforcement Law, and SENASA Resolution #683/96).

SENASA generates and distributes this information to neighboring countries (Bolivia, Paraguay, Chile, Brazil and Uruguay) and to others with which Argentina has animal health agreements. The SR3 report is distributed to other countries and to the O.I.E. A yearly report is sent to poultry producers' associations and to the O.I.E., OIRSA, FAO, WHO, and the Pan American Foot and Mouth Disease Center.

In 1967, Decree #254 included Newcastle Disease in Section 6 of the General Animal Health Enforcement Law, and reporting of cases became mandatory.

IF THE DISEASE OR AGENT OF THE DISEASE EXISTED AND WAS LATER ERADICATED, WHAT METHODS WERE USED FOR THE ERADICATION?

Newcastle Disease in Argentina was basically eradicated with systematic vaccination of all industrial birds during several consecutive years.
During the last two ND outbreaks in the country a stamping-out police was applied on all affected or exposed birds (August and October, 1987).
In 1993, SENASA carried out a retrospective analysis of the health status for ND. The analysis indicated that there had been no outbreaks since 1987. In 1996, an epidemio-surveillance program was adopted to identify the presence of viral activity in industrial birds, non-commercial fowl, and wild birds. Concurrently, regulations were issued authorizing specific vaccines and diagnostic laboratories, laboratory techniques were standardized, and import requirements were defined.

WHAT GEOGRAPHIC AND ENVIRONMENTAL CONDITIONS IN THE EXPORTING REGION MAY IMPACT THE PREVALENCE OF THE DISEASE OR AGENT?

Geographic and environmental characteristics in our country are not variables that impact the epidemiology of the disease.

3- STATUS OF ADJACENT REGIONS WITH RESPECT TO THE AGENT.

FOR EACH RELEVANT HAZARD, IS THE PEST OR DISEASE AGENT KNOWN TO EXIST, OR HAS IT EXISTED PREVIUSLY, IN ANY REGION ADJACENTO TO THE REGION PROPOSING TRADE?

IF YES, AT WHAT PREVALENCE?

IF NO, WHEN WAS THE MOST RECENT DIAGNOSIS?

ARE THERE ANY RELEVANT FACTORS ABOUT THE ADJACENT REGIONS THAT SHOULD BE TAKEN INTO ACCOUNT (E.G., SIZE, DISTANCE FROM ADJACENT BORDER TO AFFECTED HERDS OR ANIMALS)?

CHILE: Newcastle disease free country, in which no outbreaks are registered and an active epidemiological surveillance is carried out permanently. It is separated from the Argentine Republic by the Andean Range.
URUGUAY: Newcastle disease free country, with a minor industrial aviculture development. It is separated from the Argentine Republic by the Uruguay river.
PARAGUAY: Newcastle disease free country, status not yet recognized by the Argentine Republic. Paraguayan aviculture has a minor development. It is separated from the Argentine Republic by the Pilcomayo, Paraguay and Paraná rivers.
BRAZIL: country which has declared a region free from ND, it is comprised by Río Grande, Paraná, Santa Catarina, Mato Groso Do Sul, Sao Pablo, Mina Gerais States, in which most of the industrial poultry production is located. The Argentine Republic has not recognized this status, but has assessed the zone as of low risk. The last outbreak declared by Brazil was in the year 2001, in the Goiás State.
BOLIVIA: the industrial aviculture in this country has a minor development. According to the information published by the OIE, this country reported three outbreaks in the year 2001.

At present the Argentine Republic is not importing poultry products from these countries. Only one-day-old, breeding, parents or grandmothers birds have been imported from Brazil during the last year.

4- EXTENT OF AN ACTIVE DISEASE-CONTROL PROGRAM, IF ANY, IF THE AGENT IS KNOWN TO EXIST IN THE REGION.

As regards diseases considered as exotic and of high risk for birds, the detection of pathogenic agents coprises the following active and passive surveillance methods:

a) The Diseases Notification System.
b) Involvement in reported and suspect cases: they are inmediately carried out, supported by SENASA´s Central Laboratory.
c) Sanitary measures in view of the possible presence of outbreaks of the disease.
d) Serological monitoring.

Ante-mortem and post-mortem sanitary inspection of the birds to be slaughtered.

Active Epidemiolgical Surveillance. (Monitoring)

The National Bureau of Animal Health is devellopping an Active Surveillance Program, including sample collection in accordance with a systematic survey methodology and statistically designed to detect cases of infected birds without clinical manifestation.
This Program consists of a permanent sampling of:

a) Industrial production birds
b) Backyard or non commercial production birds
c) Messenger pigeons
d) Wild birds

Samples coming from this monitoring are processed to determine the possible presence of viral activity (Cloacal and tracheal swabbing samples for virus isolation in hen embryo), and the control of inmunity levels in vaccinated industrial birds (serum samples for determination of ND specific antibodies by HI technique).

The program is adapted on a yearly basis in accordance with the risk assessment, results obtained during the last year and practical possibilities of carrying it out. Results of monitorings carried out in the years 1996 to 2002 are shown below. See Annex II.

The information in our files on this topic was fairly general. Please provide specific information on all applicable regulations, guidelines, and contingency plans that would be used in the event of an END outbreak, including any available indemnity programs.

ATTENTION OF NEWCASTLE DISEASE SUSPECT CASES AND SANITARY MEASURES IN VIEW OF THE PRESENCE OF OUTBREAKS

Measures and procedures detailed below have been established in SENASA Resolution N° 683/96 and have been agreed with representatives of the private and official area within the scope of the National Commission of Poultry Health. These measures are comprised in a Procedures Manual used by all SENASA´s technicians related to the poultry area. See Annex III Procedures Manual.

Please provide a description of the bio-security measures in effect for commercial and backyard farms to guard against a potential reservoir of infection in wild birds. Provide data (if available) on the prevalence of END in wild fowl, game birds, fighting cocks, domestic ducks, geese, and psittacine birds produced for sale.

BIO.SECURITY IN POULTRY FARMS

Resolution N° 614/97 establishes the minimun bio-security and hygiene standards to be applied in poultry farms and in the treatment of the waste produced in them.

IN BROILERS FARMS

1.- Equipment for washing and disinfection of vehicles, equipment and tools (pressure washing).

2.- Equipment for people entering the place including change of clothes and footwear or protecting cover (plastic boots and overalls). It comprises people working in sheds, vaccinators, sexing people, supervisors, professionals, owners and visits in general.

3.- Incinerator, compost or pit for burial of dead birds, or any other chemical or thermal treatment which do not contaminate the environment, or residues contamination affecting human or animal health.

4.- Minimun distances from sheds to surrounding fence or wire netting: 50 m.

IN HIGH YIELDING FLOCKS FARMS

1.- Equipment for washing and disinfection of vehicles, equipment, cages and tools.

2.- Incinerator, compost or pit for burial of dead birds, or any other chemical or thermal treatment which do not contaminate the environment, or residues contamination affecting human or animal health.

3.- Minimun distances from sheds to surrounding fence: 50m.

IN BREEDING FARMS

1.- Complete surrounding fence avoiding entrance by non authorized places
2.- Equipment for washing and disinfecton of vehicles, equipment and tools.
3.- Sanitary facilities with showers and proper clothes for the staff and visitors.
4.- Solid built sheds and in good maintenance allowing cleaning and disinfection.
5.- Shed sides with thin wire mesh avoiding entrance of wild birds.
6.- Incinerator, compost or pit for burial of dead birds, or any other chemical or thermal treatment which do not contaminate the environment, or residues contamination affecting human or animal health.
7.- Minimun distances from sheds to surrounding fence: 50m.

IN HATCHING PLANTS

1.- The hatching plant should be built with materials which make hygiene easier and allow an adequate sanitary control.
2.- The hatchery plant should include the following working areas:
*egg reception and egg storage room.
*fumigation chamber.
*birth room.
*bird sorting, vaccination, sexing and dispatch room.
*vaccine handling room.
*facilities for cleaning and disinfection of equipment
*crematory or any other mean of adequate waste disposal
*changing room, showers, and toilettes in the way of the staff and other people entering the place.
3.- The hatchery plant should count with an adequate one way direction air flow, as chicks and eggs.
4.- The hatching plant should be intended for hatching eggs of only one specie.

LOCATION OF THE FARMS

1.- fattening chicken farms or high yielding hen farms or any other kind of bird farms (pheasans, quails, turkeys, etc.) should not be located in a radius of less than 10 kms from Parents Breeding Farms, previously built, complying with the requirements of this standard and approved.
2.- Grandparents Breeding Farms should be located in a radius of no less than 10 kms from other poultry farms, previously built.
3.- Parents Breeding Farms should be located in a radius of no less than 5 kms from other poultry farms, previously built.

4.- Fattening chicken farms or laying hen farms or any other bird species farms should be located respecting a mininum distance of 1000m with respect to other similar farms previously built.

Handling of cadavers, residues and wastes.

1. Cadavers: All the poultry farms should eliminate dead birds from daily mortality inside the farm, being able to use the most convenient mechanism, including compost, burial or any other chemical or thermal treatment not producing emvironmental contaminatinos, or residues contamination affecting human or animal health. Both disposal of dead birds outside the farm and their movement intended for feeding other animals is prohibited. If bird mortality were very high due to non infectious reasons, dead birds may be transported by truck, not loosing its content, to a destination allowed by the corresponding municipal or departamental authorities accompanied by a sanitary certificate issued by the farm veterinary in which the following shall be detailed:

Origin: Place.....

Name of the farm.....

Owner.....

Destination: Place.....

"The undersigned veterinary certifies that:

The dead birds being transported havenot been affected by infecto-contagious poultry diseases during the last 30 days ".

Signature, name and matriculation N° of the responsible professional.

2. Litter in the shed: The litter used in sheds should be eliminated inside the farm using the most convenient mechanism according with what is detailed in point D. 1. If there is any inconvenience to carry out any one of these mechanisms point d.2. (manure) shall be taken into account. The used litter from sheds of birds affected by Salmonellosis or by Newcastle disease should be moistened and piled together to cause fermenting warmth and decontamination. Afterwards it should be scattered and treated with adequate methods for decontamination.

3. Manure: Manure originated in laying farms should be transported in trucks not loosing their content. The manure should not be transported if any of the following bird diseases have been present in the farm: Newcastle disease, Avian Salmonellosis or if the presence of Salmonella enteriditis has been detected.

Prevalence of Newcastle disease in wild birds, game birds, fighting coks, domestic ducks, geese, etc.

The sampling carried out on (date) in this type of birds with the target of determining the possible presence of ND virus has shown negative results. It has been detected that some wild birds show not very high antibodies titers for the HI test. B1 and La Sota strains have been isolated from these birds, which would indicate that they are in contact with vaccine virus originated in industrial birds, possibly through hen manure, litter in the shed, etc. The only specie from which virulent ND virus has been isolated is pigeons (pigeon Paramixovirus) and specially those from the cities. This was the reason for the decission to compulsory vaccinate messenger pigeons, as they are in contact with the others during their flights.

ARE INFECTED OR EXPOSED ANIMALS OR PREMISES QUARANTINED? IF SO, FOR HOW LONG?

ARE AFFECTED PREMISES MONITORED, AND IF SO, HOW?

WHAT TESTS ARE PERFORMED PRIOR TO RELEASING THE QUARANTINE?

IF DEPOPULATION IS USED, HAW ARE CARCASSES DISPOSED OF (ARE THEY SALVAGED AT ABATTOIRS)?

These questions are answered in the Annex III Procedures Manual.

IS INDEMNITY PAID ON DESTROYED ANIMALS?

Indemnity is not foreseen in cases of destroyed animals.

HAVE PREMISES, THOUGHT TO HAVE BEEN CLEANED UP, LATER BEEN FOUND TO STILL BE AFFECTED?

There is no registry of cases.

5- VACCINATION STATUS OF THE REGION. WHEN WAS THE LAST VACCINATION? WHAT IS THE EXTENT OF VACCINATION IF IT IS CURRENLY USED, AND WHAT VACCINE IS BEING USED?
WHEN WAS THE LAST VACCINATION?

WHO IS AUTHORIZED TO ADMINISTER THE VACCINE AND UNDER WHAT CONDITIONS?
Also, please provide an explanation for the widespread use of vaccines in commercial birds if lentogenic Newcastle disease is not endemic.
Vaccination status of the region:

Newcastle disease vaccination is not mandatory. Compulsory vaccination has only been established for messenger pigeons. Vaccination plans include production birds, breed birds and ornamenthal birds in markets and exhibitions. Chicken domestic farms do not vaccinate, except when they participate in exhibitions or fairs. At present, vaccinal coverage reaches an 80% of the country poultry population.

The rulings in force authorizes vaccines manufactures exclusively from lentogenic strains, with a n ICPI value inferior to 0.7 (La Sota, B1, VGGA, Ulster strains, etc.) ND vaccines for pigeons should be manufactured with pigeon Paramoxivirus strains and they are subjected to potence tests at SENASA´s Laboratory.

Vaccines being used, both national or imported, are all controlled by SENASA. There are national and imported live or inactivated ND vaccines in the country.

Rulings on ND vaccination
In accordance with the rulings in force Resolution N° 690/75, import of live virus vaccines, manufactured with non pathogenic strains: B1 or La Sota is authorized. At the same time, by Resolution N° 465/96 the use, trade or import of vaccines manufactured with virus inactivated pathogenic strains is forbidden.
Only the use, manufacturing, import and trade of vaccines manufactured with non pathogenic strains of Newcastle disease virus is authorized.
The type of strain of the vaccine shall be specified in the labell of the Newcastle disease vaccine package.
Official Control of the ND Vaccine
The Laboratory Bureau and Technical Control performs the controls of all the vaccines traded in the country, both national or imported, which include the following data:

Inactivated ND Vaccines:

Innocuousness Test

Sterility Test

Viral Activity Test, by seroconversion, by the HI technique with 4 UHA

Live virus ND Vaccines:

Innocuousness Test

Sterility Test

Potence test in vaccines for pigeons

Titration in SPF embryo eggs

VACCINATION CONTROL YEAR 2002	
Type of vaccine	**Number of doses (x 10^3)**
Newcastle live virus	**220.930**
Newcastle inactivated	**4.000**
Newcatle + Infectious Bronchitis	**229.713**

Standard Vaccination Plan

Different vaccination plans are being used. Likewise, in most of the cases a standard plan including the following vaccinations is adopted:

Fattening birds: 2 applications up to 55 days of age, or at least 1.

Breeding Birds: 4 to 5 vaccinations, applied up to 20 weeks of age with a revaccination every 60 days, in production.

Commercial eggs production birds: 4 to 5 doses up to 20 weeks of age, revaccination every 60 days, in production.

Messenger pigeons: Vaccination is compulsory according to SENASA Resolution N° 723/2000. Pigeons shall be vaccinated twice a year when using vaccines produced specially with "pigeon virus" and every two months when using chicken vaccines. SENASA performs the potence control of all the vaccines produced for pigeons.

6-.DEGREE TO WHICH THE REGION IS SEPARATED FROM ADJACENT REGIONS OF HIGHER RISK THROUGH PHYSICAL OR OTHER BARRIERS

Physical separation of bordering regions of higher risk through physical or other barriers.

Aviculture located in the Province of Entre Ríos is currently exporting the most important quantities. This province is separated from the rest of the country by rivers, in its South, West and East borders. To enter the province of Entre Ríos by any of these points the Zarate bridge or the Paraná – Santa Fe subfluvial tunnel are needed to be crossed, on which truck transit controls exist. To the North it is connected to another province by two routes (Route 12 and Route 14), on which there are also transit controls.

7-.THE EXTENT TO WHICH MOVEMENT OF ANIMALS AND ANIMAL PRODUCTS IS CONTROLLED FROM REGINOS OF HIGHER RISK, AND THE LEVEL OF BIO-SECURITY REGARDING SUCH MOVEMENTS.

FROM WHAT COUNTRIES OR REGIONS DOES THE REQUESTING REGION IMPORT PRODUCTS THAT COULD POTENTIALLY CARRY PEST OR DISEASE AGENTS OF CONCERN?

Argentina requests from the country of origin to be declared as free from Avian Influenza and Newcastle disease (Velogenic and Viscerotropic strains) by the OIE and this condition be recognized by our country.

TO WHAT EXTENT IS THE MOVEMENT OF SUCH PRODUCTS CONTROLLED FROM REGIONS OF HIGHER RISK, AND WHAT IS THE LEVEL OF BIOSECURITY REGARDING SUCH MOVEMENTS?

WHAT TEST PROCEDURES ARE USED?

WHAT OTHER PROCEDURES ARE USED?

ARE IMPORTED ANIMALS QUARANTINED?
IF SO, FOR HOW LONG AND WHERE?

What type of border inspection is conducted to address the risk of importing END?

Regarding animals and animal products to be imported into the country:
In advance, the person interested in importing the product requests authorization, stating the approximate date of arrival, to obtain the corresponding import permit issued by the Certifications Area. Once the documents are submitted by the interested person a consultation is made to the Animal Quarantine Bureau.

The Animal Quarantine Bureau, area in charge of assessing the submittance, informs of the factibility or not, according to the sanitary risk of the country of origin of the product. If import is possible the Certifications Area is informed together with the sanitary requirements. In case import is denied, the reasons for this sanitary decission are submitted to inform the interested person.

When the import is accepted and the import file opened, a Fax is sent to the SENASA Official Veterinary at the zone of destination in which there is a requirement for the inspection of the place where animals shall be quarantined, taking into account, among other conditions, guarantees regarding biosecurity, isolation, exclusively dedicated staff and notification of approval of the premises. In addition to this, the clinical condition of the animals shall be controlled at the moment of import and the boxes containing the products burnt.

By means of another Fax the Border Post receiving them is requested to carry out a sample collection at random according to Resolution N° 203/01 to be submitted to SENASA´s Central Laboratory and to interdict, without right to be used, the lot of animals sent to the approved quarantine premises.

The Border Post assesses the Import Zoosanitary Certificate and allows the entrance os animals with the authorization of the Live Animals Certifications Area, completing the Verification Act, taking into account what was stated in the previous paragraph.

SENASA´s Central Laboratory, after the corresponding tests, issues an analysis protocol with results on Salmonella SP, Galliseptum Mycoplasma, Sinoviae Mycoplasma, Avian Influenza and Newcastle disease, which is added to the import file.

With the satisfactory results, the Live Animals Certification Area removes the interdiction and informs the importing party and the SENASA Official Veterinary in charge of the quarantine of the decission.

ARE IMPORT PERMITS AND HEALTH CERTIFICATES REQUIRED?

Yes, permits and certificates are required, see Annex IV.

Where are border inspection posts located? Please attach maps or the locations of inspection posts, check points, etc, and include the highways/roads these posts are servicing

See Annex V

What specific activities are carried out at each of the inspection posts (e.g., inspection, cleaning and disinfection, etc.)? How are they staffed, and how do they operate?

Two different kind of controls are carried out at the border posts: luggage and passengers control, performed in all the border posts (Resol. 295/99) and commercial import control carried out in the authorized border posts (mainly in Ezeiza and to a lesser extent in Iguazú Port – Misiones).

The routine procedure is described in the Procedures Manuals, as well as the sample collection lists, way of submittance of the lot, etc.

In general, the procedure could be described as follows:

a) Approval of import application, at Central Level, communication with the Local Veterinary for approval of quarantine and its working Order (Live Animals and Reproductive Material Certifications area).
b) Inspection at lot entry (it is carried out at the Approved Border Post, at entry). General inspection of the lot, sample collection and submittance to SENASA´s Laboratory and issuance of the imported merchandise transit documents (Restricted Transit Permit), which should be interdicted until realease. Transport to the place of destination will be carried out in vehicles approved by SENASA, closed and sealed.
c) Post entry Quarantine Control, performed by the local Veterinary of the place of destination of the imported lot.
d) Release of the imported lot, carried out by the Live Animals and Reproductive Material Certification Area, once the negative results from the laboratory have been received.
e) In general, there are approximately 20 days from the moment the lot entries the country till release.
f) The official staff assigned to the Border Posts is the following:

<u>INTERNATIONAL AIRPORT MINISTRO PISTARINI AT EZEIZA</u>
Commercial cargo Veterinary Inspection Service:
Professionals: five (5)
Auxiliary Technicians: five (5)

Luggage and Passengers Control Area:
Professionals: one (1) Agricultural Eng.-one (1) Veterinary Physician

Auxiliary Technicians: twenty one (21)

IGUAZU PORT-MISIONES

Professionals: two (2) Veterinary Physicians - two (2) Agricultural Eng.

Auxiliary technicians: four (4)

Annex VI

What type of END-susceptible birds and products are confiscated, how much of each type, and from what regions or countries?

Chicken or hens in small quantities are seldom confiscated in the Province of Misiones, due to informal transit of people at the zones bordering with Brazil. The procedure is generally started by the Border Police, during routine patrols at bordering areas. Once the irregularity is detected, the merchandise is confiscated and SENASA is informed, being the birds slaughtered and the rests destroyed by cremation or burial.

What is done with confiscated materials? Please provide data on the number of inspectors, level of inspections, and the types and number of animals, vehicles and commodities inspected at each post.

Vehicles control at approved Border Posts is performed within the framework of the Border Neighbouring Transit. This system is used by the border populations to get merchandises or food at a lower price at the neighbouring country and no live birds have been detected. At the Approved Border Posts (ABP) there are permanent confiscations of chicken carcasses which are destroyed according to each ABP.

PERSONNEL ASSIGNED TO CONTROL APPROVED BORDER POSTS

AGRICULTURAL ENGINEERS	102
AUXILIARY TECHNICIANS	173
AUXILIARY ADMINISTRATIVES	65
NUMBER OF PERSONNEL	394

TERRESTRIAL POSTS 20

PORTS	18
INTERNATIONAL AIRPORTS	6

NUMBER OF POSTS	44

How long are imported birds quarantined?

Quarantine is only used for non authorized birds to be imported in a few cases, if a bird is entered as a "pet", without complying with the authorization procedures. In these cases an Act is made to the passenger and the bird is submitted to the owner´s address as confiscated for a period of thirty (30) days, being inspected by personnel of this Service to verify the sanitary condition of the bird.

Where are the quarantine centers located, and who is responsible for maintaining them and for testing protocols for monitoring or treating birds?

Please provide copies of your import regulations and your new standards for importing day-old chicks and fertile eggs

See Annex IV Import and Export Certificates.

How many chicks and eggs are imported monthly?

IMPORT OF LIVE BIRDS. YEAR 2001							
Country of Origin	**Adult birds**	**One day old chicken**	**Hatching eggs**	**SPF hatching eggs**	**One day old turkeys**	**Pheasans**	**One day old ducks**
Perú	4						
Brasil		222.785	32.890.000				
Chile		676.525	3.069.000				
Uruguay		158.000	1.278.000				
EEUU		170.442	13.200		3.000		6.670
Alemania		78.418		300			
Gran Bretaña		81475					
Francia		1120					2.288
Bélgica						12	

IMPORT OF LIVE BIRDS YEAR 2002					
Country of Origin	**One day old chicken**	**Hatching eggs**	**SPF hatching eggs**	**Turkeys – hatching eggs**	**One day old ducks**
Uruguay		78.000			
Brasil	53.920	45360			
Alemania	58.710	6.280	2.500		

México			19.000		
EEUU	110.918				
Gran Bretaña	22.020				
Chile	21.080				
Holanda	19.346				
Canadá				1.100	
Francia					3.036

(*) In the year 2002 import volumes of one-day-old birds were less due to Resolution N° 498/2001 stating certain restrictions to one-day-old birds and hatching eggs imports, authorizing only imports of breeding birds within this group.

8. LIVESTOCK DEMOGRAPHICS AND MARKETING PRACTICES IN THE REGION

How are census data obtained and maintained?

Data supplied in this report has been extracted from the *Registro Nacional de Productores Agropecuarios* (RENSPA, National Farmers' Register), the National Livestock Census (INDEC) and industries of poultry sector.

Where are the major marketing centers located, and what types of inspections are conducted at those centers? What inspection force is maintained in these centers and throughout the country? What types of records are reviewed and/or maintained at these centers? How are END-susceptible species transported and handled during market transactions?

Please provide maps of market locations where backyard birds from non-commercial farms are traded. If there are no live bird markets, where do people purchase replacement birds for their flocks?

There are no markets in which live birds are traded for consumption. Familiar productions purchase day-old chicks in bird shops or shops where livestock products are sold. These, at the same time, purchase small numbers at hatcheries of industrial poultry breeding. These places, bird shops or shops where livestock products are sold, are inspected by veterinarians of pertinent Districts. For moving live birds of this category to other provinces, the person in charge of them must require a DTA (Animal Transit Document) to SENASA.

What requirements does Argentina have in place for poultry slaughtered for export? How many slaughter facilities are located in Argentina? How many are Federally inspected?

Requirements are stated in SENASA Rule N° 969/97. See Annex I.

How many have been certified for export to the United States? What is the location of each?

No establishments are certified for export to the United States.

What are the procedures for approving such facilities for export and to which countries does Argentina export poultry and poultry products?

There are 47 slaughterhouses approved by the SENASA, 12 are exporters. So far, no establishments have been approved for the United States, but 12 plants would meet the export conditions to said country. These plants apply HACCP programs and, in the event of future exports, microbiology criteria and sampling methods related to the pathogen reduction program as used in the American regulation would only be necessary to adjust.

Argentina exports essentially fresh frozen poultry meat and cooked poultry meat to the European Union, Russia, South Africa and Chile.

What commodities does Argentina want to export to the United States and in what quantities on a yearly basis? Please identify any risk pathways that may introduce END into the United States. What are the export procedures for each commodity of interest, including storage or quarantine conditions and times, as well as transport procedures?

Plants are approved for export according to its designs, facilities, application of GMP´s, SSOP´s adequately and in agreement with other technical aspects required by buying countries.

"How has the flow of birds and poultry products in general been affected; by recent changes in the Argentine economy?"

Poultry meat production years 2001 and 2002(data expressed in number of heads)		
PROVINCE	**2001**	**2002**
Buenos Aires	143,089,239	97,729,674
Córdoba	4,483,677	4,571,718
Entre Ríos	167,826,758	137,029,963
Mendoza	4,712,310	347,036
Río Negro	10,035,656	8,207,903
Santa Fé	13,678,543	12,996,809
Total Country	343,826,183	260,883,103
Total Country in Tn	**687,653.36**	**521,766**

EGGS PRODUCTION YEARS 2000 – 2001 – 2002			
Type of Product	**Year 2000**	**Year 2001**	**Year 2002**
Eggs in shells(thousands of crates)	16,217	14,976	12,658
Liquid eggs in metric Tn	27,445	20,955	19,293
Egg production per bird	295	292	290
Egg consumption per person	158	148	126

During the '90, poultry production has been increasing due to several and different factors. Perhaps, one of the most important factors to highlight is the change in population's consumption habits, that caused a relative replacement in total consumption of proteins per inhabitant, over TWENTY FIVE PERCENT (25%).

The important development registered in those years has meant a great concentration of population in the same traditional poultry breeding areas from the Provinces of BUENOS AIRES and ENTRE RIOS and not a geographic expansion of production.

NUMBER OF ANIMALS PER SPECIES IN PARTICULAR, IS IN THE PLACE?

INDUSTRIAL POULTRY PRODUCTION

Commercial broilers (Broilers)..... 70,000,000
Heavy Breeding flocks..... 3,300,000
High yielding hens..... 18,000,000
Light Breeding flocks..... 500,000
High yielding Stocking hen..... 4,300,000
Turkeys..... 125.000
TOTAL.....96.225.000

POULTRY SLAUGHTERHOUSES.

National- approved slaughterhouses: 43
Non- approved slaughterhouses (aprox.): 10
Total (aprox.): 53

HATCHING PLANTS.

Total of hatching plants: 60

HOW ARE THEY DISTRIBUTED? (Eg. DENSITY OF FLOCKS, ETC.)

Poultry breeding is the second livestock production in the country after cattle production. Meat production is essentially concentrated in 65 "vertical-type integrations". The "integration" process in Argentine poultry breeding was produced in the '70s. This type of organization has achieved better technology, efficiency and less production costs.
Each company has breeding farms (grandparents and/or parents), hatching plants, integrated farms of broilers, feed producing mill, slaughter and processing plant, veterinary service and diagnostic laboratory in some cases.
Poultry production is mainly geographically distributed in the provinces of Buenos Aires, Entre Ríos, Santa Fe, Córdoba and Mendoza.

Distribution of industrial birds' population per province:
Provinces of:

- Buenos Aires (43%),
- Entre Ríos (49%),
- Córdoba (3%),
- Santa Fe (3%) y
- Mendoza (3%):
- The other provinces of the country.

Commercial broilers production farms have in general an average of 4 to 5 barns each, in which the animal population density is 10/12 birds per square meter. Within the same farm, birds are of same age that allows the producer to empty the farm when they go to slaughter. From the epidemiological viewpoint it is possible to consider that birds of a farm make up a batch or an epidemiological unit.
As to breeding flocks concerns, farms are composed of nucleus, make up of 2 or 3 barns. In each barn, 4 or 5 females per male and per square meter are housed, according to the genetic line. Each nucleus houses birds of the same age that are attended by the same person and receives the same health management, thus, in this type of birds, the nucleus may be considered as epidemiological unit.

WHERE ARE THE MAJOR MARKETING CENTERS LOCATED?

WHICH ARE THE LIVESTOCK MOVEMENT PATTERNS WITHIN THE REGION?

HOW ARE THESE ANIMALS TRANSPORTED AND HANDLED DURING MARKET TRANSACTIONS?

9. TYPE AND EXTENT OF EPIDEMIOLOGICAL SURVEILLANCE IN THE REGION, EG. ACTIVE AND/OR PASSIVE? WHICH IS THE QUANTITY AND QUALITY OF SAMPLING AND TESTING?

ARE LABORATORY TESTS RUN ON SUSPICIOUS CASES? IF SO, WHAT PROCEDURES ARE USED, (FOR EXAMPLE, WHAT PROPORTION OF SUSPICIOUS CASES ARE EVALUATED USING EACH OF THE SPECIFIC LABORATORY PROCEDURES?

ARE QUARANTINE ON THE PREMISES WITH SUSPICIOUS CASES UNTIL FINAL DIAGNOSIS?

ARE SERUM INVESTIGATION IN PLACE, IF SO, HOW FREQUENTLY, WHAT SIZE OF THE SAMPLE IS USED AND WHAT HAS BEEN FOUND?

IS REPORTING OF SICK BIRDS MANDATORY, AND IF SO, WHAT IS THE PROCEDURE (BY WHOM AND TO WHOM) AND WHAT PENALTIES ARE INVOLVED FOR FAILURE TO REPORT?

We note in the information provided in your 2002 submission on backyard flocks that, in 2001, the largest numbers of backyard hen and chicken flocks were located in the' provinces of Buenos Aires, Formosa, Misiones, and Neuquen. However, testing appeared to be targeted to the provinces of Buenos Aires, Cordoba, Entre Rios and Santa Fe. What was the rationale for the selection of these provinces for testing? Should: testing be focused on provinces with the largest numbers of backyard flocks? Is surveillance targeted to high risk areas?

Certainly, the selection of Buenos Aires, Córdoba, Entre Ríos and Santa Fe provinces responds, as it was mentioned before, to the fact that the country's commercial poultry facilities are concentrated in those provinces, therefore they are considered as having the highest risk.

What is the rationale for the sampling approach used for commercial and backyard, flocks? The information provided should address the rationales for (1) selection of target' premises and populations, (2) selection of locations

and types of facilities for sampling; (e.g. risk considerations for selection of rural markets, slaughterhouses or pigeons); and (3) statistical significance/confidence levels associated with sampling levels. For example, the following information would be useful:

The target populations selected based on prior clinical observation, vaccination status, number of birds in high-risk areas in the central to northern region of Argentina, and sampling plans;

- ***The number of samples tested for NCD by department and type of operation or commercial company;***
- ***The vaccination status of birds sampled, the type of test and the number of samples that were positive, the number of samples tested by viral isolation, and the number confirmed positive by the same procedure;***
- ***The total number of negative tests;***
- ***The number of sick and/or dead birds (sick/dead birds with clinical signs of respiratory or neurological disease);***
- ***Other procedures conducted on suspicious birds (please indicate whether sick, dead, or suspect birds are routinely tested for NCD); and***
- ***Any inspection and/or testing procedures conducted at slaughter or in production facilities that would potentially produce product for export to the United States.***

Include any reports available on your efforts to evaluate the progress of the surveillance program.

Argentina has some 53,370 backyard flocks. These flocks may not have been adequately tested, since the surveillance of backyard flocks was represented by some 837 samples in 1997. In 1998, 180 samples were taken from unvaccinated throughbred hens, all derived from a rural exhibition. Sick and dead birds from backyard flocks cannot be expected to have been included in the 1998 sample. Even though all except one sample tested negative, the sample

size (180) taken in 1998 was very small. The one positive sample was attributed to a lentogenic strain. A larger sample for virus isolation taken strictly from unvaccinated backyard flocks would provide greater confidence of freedom from NCD virus in Argentina.

The previous sample numbers were taken from Table III under Diagnostic Laboratory Capabilities. Table 111, left hand column, depicts a total of some 55,606 samples processed between 1996-1998. Addition of the individual sample numbers, however, yields a sum total of only 15,606, albeit all negative except for lentogenic strains. This discrepancy should be clarified.

TYPE AND EXTENT OF DISEASE SURVEILLANCE

Apparently there have been some interpretations on the information sent which is necessary to be clarified.

During 1996, 1997, 1998, 1999 and 2000 the epidemiological surveillance has been mainly targeted to the detection of possible viral activity of NCD virus in industrial production flocks. During those years, great number of cloacal and tracheal samples were taken for viral isolation in hens embryos.

All of them turn out to be negative or vaccine strains of the NCD virus have been isolated since the birds have received at least one doses of vaccine (Broilers).

Since 2001 sampling in industrial flocks' serum at slaughterhouses has been implemented in order to research which were the vaccine level protection that develops in industrial poultry activity. During this year, only samples for viral isolation from non-industrial flocks from markets and rural exhibitions have been taken. Mostly from throughbred flocks of the central area of the country, Buenos Aires, Córdoba, Santa Fe and Entre Ríos.

In 2002 the epidemiological surveillance has followed the following criteria that will be the same as for the sampling foreseen for 2003 and 2004:

Objective: Low probability of presence of virulent strains of Newcastle disease in industrial flocks is estimated due to the fact that this population is vaccinated and develops the activity under strict biosafety standards and backgrounds of sampling in previous years. Thus, the objective of the surveillance system is to early detect possible viral activity of the NCD virus in non-commercial flocks and to determine average protection levels with which industrial production activity is developed.

TARGET POPULATION I

Non industrial flocks in the Argentine Republic

Populations to be studied:

1) Wild flocks
2) Zoo flocks
3) Backyard flocks
4) Imported flocks

TARGET POPULATION II

Industrial flocks in the Argentine Republic

Populations to be studied:

5) Breeding grandmothers and parents, heavy and light flocks
6) High yielding hens
7) Commercial broilers (broilers)

PRIMARY SAMPLING UNITS

For industrial flocks

1) For industrial breeding flocks, grandmothers and parents: **Nucleus**
2) High yielding hens (Commercial eggs): **Batch for slaughter**
3) Commercial broilers : **Batch for slaughter**

For non - industrial flocks

1) Jurisdictions or towns
2) Rural exhibitions
3) For ornamental flocks: zoos

LABORATORY TESTING

Newcastle disease:

Serology: Haemoagglutination Inhibition Tests.
Isolation: Harvest in hens embryos
Typing: PCR Test

PLEASE FIND ATTACHED THE LISTS AND ROLLS WITH SAMPLES OF THE EPIDEMIOLOGICAL SURVEILLANCE CARRIED OUT.

Concerning SENASA Rule N° 683/97, it only sets forth the information system and technical standards for attending outbreaks or suspects. This Rule is in the Procedures Manual that SENASA's veterinarians have at farms, slaughterhouses and border posts.

Criteria used to design samplings:

Industrial Flocks:

Grandmothers and parents breeding flocks in the country: the criteria used is to take 20 samples per breeding nucleus (15 samples of females and 5 samples of males), this number is set for populations over 1,000 animals to have a confidence of 95% and prevalence (supposed and estimated) of 15%. **Nucleus** is the Epidemiological Unit, because within each nucleus, generally composed of 2 or 3 barns, all birds are the same age, are managed the same manner, following the same production and health management and are attended by the same person. In addition, they are isolated from other birds.

High yielding hens and broilers: Blood samples at slaughter are taken since layer hens for commercial eggs are sent to slaughterhouses approved by SENASA to be slaughtered to finish their laying cycle.
This sampling consists of sending 30 serum samples, each batch, once per month throughout the year from all slaughterhouses considering flocks over 10,000 birds with a confidence of 95% and a prevalence estimated of 10%.

Non industrial birds:

For this kind of birds, familiar or backyard production, is considered the Epidemiological Unit of sampling in the "Jurisdiction" pertinent to each SENASA's Local Office, or towns in a jurisdiction. This kind of birds lives in small population units, in direct or indi-

rect contact with persons, no type of isolation, high susceptibility to the disease and are not vaccinated.

Ten samples of cloacal or tracheal swab of each district are taken, if the number of birds present is less or equal to 10. Samples of all birds are taken, if the number of birds is above 10. This number of samples is fixed. This design supposes a prevalence of 1% and a confidence level of 95%.

To make a difference between zone A and zone B, samples are taken as follows. Zone A, provinces bordering with Brazil and Paraguay, and zone B: rest of the country.

From zone A samples of 2 batches per local office will be taken.

From zone B samples of 1 batch per local office will be taken

Total batches to be sampled: 497

Total samples: 4.970

Samples of the same batch will be grouped in two pools of 5, so finally viral isolation of 994 pools will be processed.

In wild or ornamental birds:

Samples from wild birds are submitted by official agencies' personnel, Departments of Fauna and other non governmental agencies (ONG) responsible for controlling and protecting wild fauna. As to ornamental birds, the requirement of sample taking of all birds for imports is applied during compulsory quarantine.

Your document contains the following statement: "...the Program changes year to year; according to the risk assessment." What does this statement mean? In what way does the Program change on a yearly basis?

The statement "the Program changes on a yearly basis" means that according to the results assessments, some modifications are carried out. For example, after having taken almost 50,000 samples from industrial production between 1996 and 1998 and almost 18,000 between 1999 and 2000, as they were negative, it has been decided that for industrial birds we should control the levels of vaccine protection and target the research for possible presence of viral activity to non-industrial birds. In 2001 and 2002, this research has been targeted mainly to non- industrial birds of the provinces bordering Brazil and Paraguay.

As to data that you have, we require to check the attached lists.

We request an English translation of SENASA Rule No 234/96 (National Epidemiological Surveillance System). Is the "Active Epidemiological Surveillance Program for Newcastle Disease" the same as SENASA Rule 683/96? If not, an English' language translation would assist our evaluation.

English version is provided in the Annex I Current Rules.

In the table labeled, "Information on avian disease diagnosis recorded in 2001," test results were reported from only two provinces, Buenos Aires and Entre Rios. Were these the only provinces from which samples for differential diagnosis were required, or, were, Buenos Aires and Entre Rios the only provinces sampled? If they were the only provinces sampled, what was the rationale?

The table mentioned above also indicates that 11 pigeons were sampled from "different areas." What was the rationale for the areas and/or birds sampled?

The sample testing of eleven pigeons as mentioned corresponds to samples of findings sent by private laboratories. They do not correspond to a pre-established design.

10- DIAGNOSTIC LABORATORY CAPABILITIES

WHAT IS THE DIAGNOSTIC LABORATORY CAPABILITIES?

ARE THERE LABORATORIES APPROVED TO ISOLATE, IDENTIFY AND TYPE AGENTS? (IF YES, INDICATE NAMES AND ADDRESSES OF EACH ONE)

WHAT BIO-SECURITY MEASURES ARE IN PLACE IN THE LABORATORIES TO PREVENT ESCAPE OF BIOLOGICAL AGENTS?

WHAT KIND OF TRAINING THE DIAGNOSTIC PERSONNEL HAS REGARDING THE SPECIFIC DISEASE AGENTS OF CONCERN

- ***Describe the following for each of your central, reference, and regional laboratories:***
- ***standards for approving laboratories to isolate, identify, and type or characterize the pathogenicity of the disease agent***
- Due to the "Sanitary Status" of the Argentine Republic of the Newcastle disease (NCD), so far the DILAB is the **only** Laboratory that carries out diagnosis with official validity of NCD. The laboratory performs its tasks according to standards set in the "Manual of Standards for Diagnostic Tests and Vaccines".

So far, the Quality Standards ISO IEC 17025/IRAM 301 "General requirements for the Competence of Calibration and Testing Laboratories" are being implemented.

- ***bio-security measures in place in the laboratories to prevent escape of biological agents;***
- Although DILAB has a Biosafety Laboratory NBS 3A, for this diagnosis and due to the sanitary status, the laboratory meets the safety measures type 2 combined with Good Laboratory Practices (GLP).
  If there is a suspect of the disease, assays are performed at the NBS 3 safety level.
  Pathological-biological residues comply with the procedures of elimination by temperature process (digestor and autoclave).

- ***the kind of training the diagnostic personnel had regarding the specific disease agents of concern***
- Staff working at the diagnostic laboratories of NCD has university studies in Veterinary Medicine specialized in this particular issues which are recorded in their personal files.

- ***the recordkeeping system available in each laboratory;***
- Each area of the laboratory has its specific DILAB's Quality Management Manuals and Operating Procedures, daily work protocols, records of manual documentation. The Reception Desk of Samples has an Information Management System centralized and computer- based.

- ***the number of clinical submissions processed by the laboratories each year to rule out the disease agent in the requesting region***
- No samples have been received by suspects in the industrial poultry sector.
  On a yearly basis, samples of wild birds and pigeons are sent by private practitioners.

  The timeframes involved in sample collection (how much time elapses from when the sample is collected to when it is delivered to the laboratory, and how much time elapses from when the laboratory receives the sample to when results are obtained?);
  The Coordinating Department of Quarantine, Borders and Certifications delivers the samples of import and export in a period elapsed between 1 and 3 days, for the process sample taking/ entry the laboratory. The diagnostic process varies between 15 to 20 days. Monitoring samples are processed and kept in liquid nitrogen at -70 °C being incorporated to diagnosis according to the work area.

- ***the quality control program for the laboratories. Does the program reviewed by a laboratory specialist?***
- So far, the Quality Standard ISO IEC 17025 has been implemented including intralaboratory quality controls verified by the Chief of the area.

How many sick or dead birds are sent to the central or regional laboratories for diagnosis that are not part of the surveillance sampling?

How many samples were tested in the years 2000 to 2003 for non-poultry species of birds?

Are laboratory tests run on suspicious cases? If so, what procedures are used, and what proportion of suspicious cases are evaluated using each of the specific laboratory procedures?

What other procedures are used to investigate suspicious cases?

If there is a suspect case, does SENASA place a pre-diagnostic quarantine on the premises of origin prior to completion's of identification and typing? If not, why not?

We note in the information on epidemiological surveillance in 2001 that serological samples measuring haemagglutination were 100% negative (5,391 samples and 1,660 samples at the INTA Laboratory). We would not expect a proportion of negative tests so high due to the number of tested samples. Which is the sensibility and specificity degree of tests used? Has any presumptive positive test need to be confirmed as negative?

On the information on virus isolation, it would seem that the isolation of lentogenic strains occurs with a lower frequency as expected for an endemic area. Might be that the laboratory do not inform on positive samples due to lentogenic strains because of a problem with virus isolation?

Low detection of lentogenic strains may be the reason for critical points in:

- Flocks selected in the latest samplings that have not been vaccinated (backyard, baby imports, throughbred hens).

  Number of passages per embryo of the original sample carried out in studies during 2001. Since July 2002 the isolation technique with 2 passages has been implemented to increase sensibility on diagnosis.

11- POLICIES AND INFRASTRUCTURE FOR ANIMAL DISEASE CONTROL IN THE REGION

WHICH POLICIES AND INFRASTRUCTURE ARE IN PLACE TO ATTEND AN EMERGENCY IN CASE OF AN OUTBREAK?

Available resources and procedures to control the disease should be clearly defined. If there is an outbreak of NCD in Argentina:

Which is the period (days) foreseen since the infection of the first non- imported domestic fowl until the outbreak detection ?

In suspicious cases or during an outbreak, which is the time elapsed between the sample taking and its deliver to the laboratory?

When an infection with NCD is initially detected, which is the period (days) between an order to stop an export until controls on exports are carried out?

The responses are in the Annex III: Exhibit-Manual for attending an outbreak.